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<u>Via ECFS</u>
Marlene H. Dortch
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Notice of Ex Parte Submission, Petition for Rulemaking filed by Amateur Radio Station Licensee Ron Kolarik (K0IDT), RM-11831

Dear Ms. Dortch:

I submit this ex parte letter with new information about the preferences of amateur radio operators for self-policing of the WINLINK system.

INTRODUCTION

One of my goals in addressing RM-11831 has been to get <u>factual documentation</u> of the issues involved¹ ^{2 3 4}, rather than merely provide opinionated argument. My personal review of the large number of filings indicated a relatively *small* amount of technically-competent discussion of the issues raised by the Petitioner. I am continuing to try and add factual and/or statistical data for the use of the Commission.

In this document I try to address the actual current interest in additional monitoring systems beyond those already existing, for the necessary self-policing of the WINLINK facet of amateur radio.

Multiple filers have requested methods for effectively monitoring amateur radio communications via the WINLINK system. Anecdotal evidence indicated that systems operators of WINLINK gateways were not maximally utilizing the tools provided by the WINLINK Development Team ("WDT") for detecting issues.⁵ Somewhat out of frustration with this situation, and as a result of the Petition, the

¹ Objective documentation of possible rates of 97.221(c) USA Winlink interference: https://ecfsapi.fcc.gov/file/10408063816674/FCCRM11831-2.pdf

Novel experimental proof that WINLINK is not encrypted: https://ecfsapi.fcc.gov/file/10410170249078/FCCRM11831-4.pdf

³ Additional documentation of repeated proofs that WINLINK communications are not encrypted: https://ecfsapi.fcc.gov/file/1071540521688/FCCCommentJuly2019.pdf

⁴ First ever documentation of rates of FCC non-compliance, and of improvement in those rates due to Winlink distributed receiver/viewer system: https://ecfsapi.fcc.gov/file/10723230403421/IncidenceCalculations.pdf

⁵ https://ecfsapi.fcc.gov/file/10718632326911/July%2018%2C%202019%20Ex%20Parte%20Filing.pdf

WDT provided⁶ to a vast potential audience, what I believe is the first amateur radio receiving system that is

- *over-the-air* (all transmissions that are available through this receiver were literally provided by physical antennas and receivers at volunteers' stations)
- distributed (multiple disparate receivers all over the world)
- networked (providing multiple streams of data via the Internet)
- remotely accessible (not only are the receivers remote, but the users choose conversations to review from remote locations)
- accurate (apparent 100% accuracy due to the choices of protocols and techniques by WDT)
- free (no cost involved)
- automated (with automated systems to allow flagging of inappropriate content for review)
- multi-user (multiple reviewers can view simultaneously)

and includes <u>digital storage of communications</u> potentially forever. It is as if someone created a vast receiving system for PSK or RTTY that linked hundreds of FLEX receivers (using their advertised remote operation capability⁷) and provided long term storage and the ability even to monitor conversations *that occurred days into the past*. No other comparable system appears to exist in all of amateur radio, though there are diversity receiver system that simply catalog stations heard.⁸

While some filers asserted that such a system is not effective for amateur radio self-policing and enforcement⁹, data has already demonstrated that it is *very effective for precisely those purposes*¹⁰, and indeed, there is no other facet of amateur radio with such an advanced monitoring and enforcement system! The Petitioner himself has been quite active and points out how easily objectionable material can be searched for.¹¹

Still there were requests for additional methods for receiving winlink systems. There were some who were skeptical of the honesty of the WDT, believing that information might be withheld.^{12 13} Others misunderstood the handling of flagged messages and mistook that for deceit. Others did not seem to understand the nature of a **frame-based communications technology**¹⁴ and claimed or insinuated that such a system is not "real-time." These issues are surprising since it is easy to actually view any of

⁶ https://winlink.org/content/us amateur radio message viewer

⁷ https://www.flexradio.com/ssdr-for-windows/

⁸ PSKReporter https://www.pskreporter.info/pskmap.html

⁹ Rappaport: https://ecfsapi.fcc.gov/file/10724035705944/NYU%20Ex%20Parte%20Filing%20-%2007.24.19.pdf

¹⁰ Driving the non-compliance rate to the region of 0.07 of 1%: https://ecfsapi.fcc.gov/file/107301549501394/IncidenceCalculationsExParte0730.pdf

¹¹ Kolarik: https://forums.qrz.com/index.php?threads/arrl-report-no-consensus-reached-for-fcc-on-%E2%80%9Csymbol-rate%E2%80%9D-issues.666183/page-32#post-5138284

¹² See III. (b) https://ecfsapi.fcc.gov/file/10429199250117/FCC%20Letter%20Reply%20to%20Comments %20RM%2011831.pdf

¹³ https://forums.qrz.com/index.php?threads/huggins-did-it.667817/page-16#post-5149706

¹⁴ Many amateur radio operators appear unaware of other frame-based systems, where the contents of a transmission cannot be viewed until the forward error correction or other process has been completed, such as FT8, JS8. (see: http://physics.princeton.edu/pulsar/k1jt/wsjtx.html) Oddly, precisely such FEC systems were strongly suggested by T. Rappaport. (See: https://ecfsapi.fcc.gov/file/10724035705944/NYU%20Ex%20Parte%20Filing%20-%2007.24.19.pdf)

¹⁵ https://forums.grz.com/index.php?threads/huggins-did-it.667817/page-16#post-5149724

approximately 17,000 messages on the system at any time, and read as much as one might wish. It is not clear that all of the commenters have actual experience with the technology.

Therefore, it was necessary to make some estimate of the true level of demand for any kind of receiving system beyond that already provided by the WDT, and this study was undertaken to estimate that level of demand.

METHOD

On one of the most popular amateur radio forum web sites, I created a thread asking for persons who might be interested in utilizing an *additional* direct WINLINK receiving system to respond.¹⁶

While carefully explaining that I had no authority to provide such a system, I indicated that if there were interest, it might well come about. I provided modest requirements such as at least some commitment to reporting poor behavior observed on messages, and willingness to have at least some sort of background check, to avoid participants with criminal or significant mental illness issues.

The system proposed would send information directly from existing volunteers' RMS gateway stations to the monitor's computers, possibly via some form of web access, or possibly as emails to them, but it would not be encumbered by any WINLINK central system. Thus it would allow the viewers more direct access, and eliminate the concern that WINLINK were censoring any information. However, storage would be the responsibility of the participant as well.

I then left the thread open for more than 48 hours on a weekend to see how many would "sign up" to be a part of such a system if it were created.

RESULTS

The RM-11831 Petitioner was aware of this proposal, made comments within the thread, but did not request the additional access.¹⁷ An ARRL Director who has actively discussed some of these issues also commented in another related thread on the QRZ system during the time period under discussion.¹⁸

There were many comments left in the first day of the thread, which remained on the first "page" of the QRZ Ham Discussions form generally throughout that day. At this point, 60 hours into the experiment, there have been a total of 24 replies, 16 of which were from persons other than me.

The amateur callsigns having made comments on the thread at this point, in order of first posting, are:

WZ7U NN4RH W5WN NL7W W3WN

¹⁶ https://forums.grz.com/index.php?threads/who-wants-a-direct-winlink-receiver.668104/

¹⁷ https://forums.grz.com/index.php?threads/who-wants-a-direct-winlink-receiver.668104/#post-5150212

^{18 &}lt;a href="https://forums.qrz.com/index.php?threads/measurement-of-3rd-party-emails-on-winlink.668177/page-2#post-5150795">https://forums.qrz.com/index.php?threads/measurement-of-3rd-party-emails-on-winlink.668177/page-2#post-5150795

K0IDT ND6M N5RFX KD4MOJ KA9JLM

Precisely ONE amateur operator requested to be included in such a monitoring system: N5RFX

The thread did not retain the interest of QRZ Ham Radio Discussion participants. The total number of distinct commenters (from any viewpoint) on the thread was 10, out of the entire QRZ readership. QRZ reports that their forum membership is 766,238, which includes international members.¹⁹ The total current number of FCC amateur licenses is 758,577.²⁰ Although the experiment is being reported at only 60 hours' time over a weekend, it did not attract nearly as large a number of commenters as argumentative threads, or amusing threads. It has now drifted into the "3rd page" of the list of topics.

DISCUSSION

The proposed additional WINLINK monitoring system, as presented to readers, was judged by RM-11831 Petitioner K0IDT as very similar to the ARRL volunteer monitor program²¹, suggesting that the properties and conditions that I chose were reasonable.

It is very surprising, after so much acrimonious debate both on QRZ, with literally hundreds of posts²², and on the FCC electronic comment filing system (645 filings as of this writing), that only ONE amateur radio station wished to have the type of *additional* monitoring opportunity discussed in this experiment.

Possible conclusions that can be drawn from this experiment include:

- Participants may have been suspicious of an offer from a person (myself) who has been a vocal supporter of the WINLINK system. However, no one on the thread voiced any claim that such a system would be deceptive.
- Participants may believe that the currently-provided WDT distributed receiver system and remote viewing system are adequate.²³
- Participants may believe that adequate self-policing and monitoring has already been demonstrated by a published study.²⁴
- Participants may be apathetic about the entire issue and have far less enthusiasm than shown by leaders of the RM-11831 petition effort.

20 ARRL: http://www.arrl.org/fcc-license-counts

^{19 &}lt;a href="https://forums.grz.com/index.php">https://forums.grz.com/index.php

^{21 &}lt;a href="https://forums.grz.com/index.php?threads/who-wants-a-direct-winlink-receiver.668104/#post-5150212">https://forums.grz.com/index.php?threads/who-wants-a-direct-winlink-receiver.668104/#post-5150212

^{22 1,985} posts in thread: https://forums.qrz.com/index.php?threads/new-digital-petition-at-the-fcc-rm-11831.652589/

²³ https://ecfsapi.fcc.gov/file/10723230403421/IncidenceCalculations.pdf

²⁴ https://ecfsapi.fcc.gov/file/107301549501394/IncidenceCalculationsExParte0730.pdf

With the results of this study, it is difficult to find any justification that any additional monitoring need be created beyond that already provided the Winlink Development Team.

Sincerely,

/s/ Gordon L. Gibby MDKX4Z 15216 NW 41st Avenue Newberry, FL 32669

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